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sequences derived from said insertion element mutant library to a solid support as target for hybridization.

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19. A method for simultaneous screening for one or more gene insertion mutants in a population of any organism comprising:
preparing an insertion element mutant library comprising a plurality of nucleic acid insertion elements and originating from a defined population of an organism wherein said gene insertion mutants are to be detected;
amplifying insertion element flanking sequences from said insertion element mutant library; and
producing a set of labeled amplification products representing said insertion element flanking sequences derived from said insertion element mutant library to use as probes to hybridize to a solid support to which one or more nucleic acids have been fixed as target(s) for hybridisation.

20. The method according to claim 2 wherein said iPCR comprises:
digesting nucleic acid sequences of said insertion element mutant library with at least one restriction enzyme which optionally recognizes motifs of four nucleotides in genomic DNA, resulting in a collection of amplifiable genomic fragments;
ligating at least one amplifiable genomic fragment by self ligation; and
amplifying said at least one amplifiable genomic fragment using a primers based on a terminal part of an insertion element.

Remarks

The application is to be amended as previously set forth. The changes are generally made to more appropriately claim the invention in view of United States practice. It is respectfully submitted that no new matter has been added.

Respectfully submitted,

Allen C. Turner

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